| Earth Science Essentials II | Scope and Sequence |
|---|---|
| **Unit Lesson** | **Objectives** |
| **Rocks and Minerals** | |
| Minerals | |
| | Describe the properties used to identify minerals. |
| | Explain how minerals are formed. |
| | Identify uses of minerals. |
| Rocks and the Rock Cycle | |
| | Describe the properties used to identify rocks. |
| | Identify the three main groups of rocks. |
| | Identify the ways in which rocks change as they move through the rock cycle. |
| Igneous Rocks | |
| | Identify the steps of igneous rock formation. |
| | Describe the characteristics used to classify igneous rocks. |
| Sedimentary Rocks | |
| | Identify ways in which sedimentary are formed. |
| | Distinguish the three types of sedimentary rocks. |
| Metamorphic Rocks | |
| | Identify the steps of metamorphic rock formation. |
| | Differentiate types of metamorphic rocks. |
| Unit Test | |
| **Earth's Surface** | |
| Weathering and Soil | |
| | Distinguish between mechanical and chemical weathering. |

| Earth Science Essentials II | | Scope and Sequence |
|---|---|---|
| **Unit** | **Lesson** | **Objectives** |
| | | Identify factors that affect the rate of weathering. |
| | | Describe the characteristics of soil. |
| | | Explain how soil is formed. |
| | | Classify different types of soil. |
| | Erosion and Deposition | |
| | | Describe erosion and deposition. |
| | | Differentiate types of mass movement. |
| | Water and Wind Erosion | |
| | | Identify features that are formed by water erosion and deposition. |
| | | Identify causes of groundwater erosion. |
| | | Explain how glaciers and waves cause erosion and deposition. |
| | | Describe the effects of wind erosion and deposition. |
| | Landforms | |
| | | Identify what the topography of an area includes. |
| | | Identify the three main types of landforms. |
| | Models of Earth | |
| | | Explain how maps and globes represent Earth’s surface. |
| | | Describe the reference lines that are used to locate points on Earth. |
| | | Identify the three major map projections. |
| | | Explain how computers are used to map Earth’s surface. |
| | Unit Test | |
| **Earth's Atmosphere** | | |

| Earth Science Essentials II | | Scope and Sequence |
|---|---|---|
| **Unit** | **Lesson** | **Objectives** |
| | Structure and Composition of the Atmosphere | |
| | | Describe the composition of Earth’s atmosphere. |
| | | Describe the importance of the atmosphere to living things. |
| | | Identify properties of air, including pressure and density. |
| | | Explain how altitude affects air pressure and density. |
| | | Distinguish the four main layers of the atmosphere. |
| | Energy in the Atmosphere | |
| | | Identify the types of energy that travel from the Sun to Earth. |
| | | Explain what happens when the Sun’s energy reaches Earth. |
| | | Distinguish the three ways in which heat is transferred. |
| | Winds | |
| | | Examine the processes that cause wind. |
| | | Differentiate between local and global winds. |
| | | Locate the major global wind belts. |
| | Atmospheric Moisture and Precipitation | |
| | | Describe humidity and how it is measured. |
| | | Explain how clouds form. |
| | | Distinguish the three main types of clouds. |
| | | Identify common types of precipitation. |
| | Air Masses and Fronts | |
| | | Identify the major types of air masses. |
| | | Explain how air masses move. |

| Earth Science Essentials II | | Scope and Sequence |
|---|---|---|
| **Unit** | **Lesson** | **Objectives** |
| | | Differentiate the four main types of fronts. |
| | Unit Test | |
| **Earth's Resources** | | |
| | Energy on Earth | |
| | | Distinguish between renewable and nonrenewable resources. |
| | | Identify renewable and nonrenewable resources. |
| | | Identify advantages and disadvantages of various energy sources. |
| | Land Resources | |
| | | Describe land as a natural resource. |
| | | Explain how land resources are managed. |
| | Air Resources | |
| | | Describe the atmosphere as a natural resource. |
| | | Describe the importance of clean air. |
| | Human Impact on Resources | |
| | | Identify the negative impacts that human activity has had on Earth’s resources. |
| | | Identify the positive impacts that human activity has had on Earth’s resources. |
| | | Compare the costs and benefits of conservation policies. |
| | Lab: Effects of Human Activity on Freshwater Resources | |
| | | Identify sources of freshwater pollution. |
| | | Model the effect of pollutants on the quality of freshwater resources. |
| | | Predict the effect of human activity on the health of a freshwater ecosystem. |
| | Unit Test | |

| Earth Science Essentials II | Scope and Sequence |
|---|---|
| **Unit Lesson** | **Objectives** |
| **Beyond Earth** | |
| The Earth-Sun-Moon System | |
| | Explain how Earth moves in space. |
| | Explain what causes the phases of the moon. |
| | Describe solar and lunar eclipses. |
| | Explain what causes tides. |
| The Solar System | |
| | Compare the geocentric and heliocentric models of the solar system. |
| | Explain how Copernicus, Galileo, and Kepler contributed to the acceptance of the heliocentric model. |
| | Identify objects that make up the solar system. |
| The Sun | |
| | Describe the structure, composition, and physical properties of the Sun. |
| | Explain how the Sun generates energy. |
| | Discuss the different types of solar activity and explain how each activity affects Earth. |
| | Science Practice: Describe units used by astronomers to measure the distance between the Sun and Earth. |
| Planets | |
| | Identify characteristics shared by the inner planets. |
| | Identify characteristics shared by the outer planets. |
| | Identify each planet in the solar system. |
| Star Systems and Galaxies | |
| | Describe star systems. |

| Earth Science Essentials II | | Scope and Sequence |
|---|---|---|
| **Unit** | **Lesson** | **Objectives** |
| | | Distinguish the major types of galaxies. |
| | Unit Test | |
| **Cumulative Exam** | | |
| | Cumulative Exam Review | |
| | Cumulative Exam | |